

# O.P.T.

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**DOCKET**  
**06-IEP-1K**

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June 22, 2007

California Energy Commission  
Dockets Office, MS-4  
Re: Docket No. 06-IEP-1K  
1516 Ninth Street  
Sacramento, CA 95814-5512

Dear Commissioners:

Ocean Power Technologies Inc. (OPT), a leader in Ocean Wave Power Generation, wishes to comment to the CEC on the costs and assumptions listed for wave power in the 2007 IEPR D Cost of Generation document entitled "Comparative Costs of California Central Station Electricity Generation Technologies" authored by Joel Klein and Anitha Rednam and dated June 12, 2007.

On page 21 of the CEC document the Capacity Factor for Ocean Wave is assumed to be 15 %. This is too low by a factor of 2 to 3 times, based on OPT's experience with its wave power technology.

OPT, based on its ocean tests, measurements and calculations of its Power Buoy Systems off the coasts of Hawaii, New Jersey and northern coast of Spain has determined that the capacity factor for its ocean wave power stations are in the range of 30% to 45%. These numbers are considerably higher than the capacity factors for wind or solar power and result from the fact that wave power is the most concentrated form of all the renewable sources of energy.

OPT's calculations show that there are many sites off the Californian coast that have capacity factors in the range 35% to 40%. The higher capacity factors and the high availability factor of 90% for the OPT System allow for much lower capital costs and energy costs for ocean wave power than those estimated in the CEC document.

OPT expects that in volume production of Wave Power Stations using arrays of its PB500 Power Buoy – (a unit which has a rated output of 500kW ), the energy costs will be in the range 4 to 5 cents/kWh over the 30 year life time of the OPT Power Station. OPT expects that in volume production, the capital cost per kilowatt of our systems are materially less than those assumed on page 21. Please note these costs do not take into account any investment or production or carbon tax credits or capital subsidies that may be available.

Other very important advantages of the OPT Ocean Wave Power Station that have not been factored into the economics given above are:

1. Wave energy has greater predictability than wind or solar energy (one can predict the wave power up to 3 days in advance from satellite photography)
2. On the west coast of the USA wave power stations can be close to major transmission lines.
3. OPT's wave power stations are environmentally benign. They are 2-3 miles offshore, mostly below the surface (therefore no visual effect), have no audible effect, and have no negative effects on sea life.

I hope this information is useful.

Please contact me if you have any questions.

Sincerely yours,



Dr. George W. Taylor  
CEO

GWT:lms